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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,858	12/09/2003	Wu Feng Qing	P06454US01	3532
22885	7590	07/27/2005	EXAMINER	
MCKEE, VOORHEES & SEASE, P.L.C. 801 GRAND AVENUE SUITE 3200 DES MOINES, IA 50309-2721			GALL, LLOYD A	
		ART UNIT	PAPER NUMBER	
		3676		

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/730,858	QING, WU FENG	

<b>Examiner</b>	<b>Art Unit</b>	
Lloyd A. Gall	3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-40 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 09 Decemebr 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All
  - b) Some \*
  - c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

The disclosure is objected to because of the following informalities: On page 4, before line 20, a brief description of figure 7A should be inserted.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The written description must provide support for "stop" in claims 6, 8 and 19.

Claims 1-40 are objected to because of the following informalities: Throughout the claims, such as on page 8, lines 5 and 9, consistency should be maintained between "dead bolt assembly" and "dead bolt". On page 10, lines 24-25, it is not clear what is meant by the dead bolt to operatively interact with the dead bolt. On page 10, line 30, --second-- should be inserted after "the" at the end of the line. On page 11, line 24, the first occurrence of "a" should be deleted, and the second occurrence of "a" should be replaced with --the first--. On page 11, line 25, --being--should follow "spindle". On page 11, line 26, --first--should be inserted before both occurrences of "spindle". On page 11, line 29, --first--should be inserted before "spindle". On page 12, line 1, --first--should be inserted before "spindle". On page 12, line 11, "having" should be deleted. On page 12, lines 12-13, it is not clear what is meant by the dead bolt to operatively interact with the dead bolt. On page 12, line 19, --second--should be inserted before "spindle". Claims 31 should apparently depend from claim 30, since claim 31 in its present form would be the same as claim 20. On page 13, line 12, the first occurrence of "a" should be deleted, and the second occurrence of "a" should be

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replaced with --the first--. On page 13, line 13, --being—should be inserted after “spindle”. On page 13, line 14, --first—should be inserted before both occurrences of “spindle”. On page 13, line 17, --first—should be inserted before “spindle”. On page 13, line 20, --first—should be inserted before “spindle”.

Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6-10 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Lin (416).

It is first noted that independent claims 1, 8 and 16 are not positively claiming a storm door structure, and the lock of Lin is capable of being used with a storm door. Lin teaches a lock body having a pair of side plates 5, 6, a dead bolt assembly 4 installed between the plates, a cam body 74, a cam arm (the portion of the cam which has feet 75 thereon), and a finger (the tip 7 of the cam), a spring 8 cooperable with flat surfaces 71, 72 of the cam to bias the dead bolt to its locked and unlocked positions and to limit further rotation of the cam. The cam includes a cam through hole 73 to be actuated by a spindle and a key lock cylinder. The dead bolt also has a stop 44 cooperable with the

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slot 66 to limit bolt retraction as well as to limit rotation of the cam. With respect to claim 10, the dead bolt includes a first notch between actuating teeth 42, 43.

Claims 30 and 38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (839).

Chen teaches a storm door and a storm door lock body, including a storm door as seen in figure 10, having opposed faces and an edge 108 with a mortise 102, side plates 44, 45, escutcheons 36, 56, a key cylinder 38, a first spindle 74, a turn button 52, a cam body 42 with a through hole to receive the spindle 74, a cam arm 88 to engage a notch 92 in a dead bolt 46, a live bolt 82, a second spindle 32 and opposed handles 34 to actuate the live bolt 82.

Claims 1-5, 7 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (839) in view of Lin.

Chen teaches a storm door and a storm door lock body, including a storm door as seen in fig. 10, having opposed faces and an edge 108 with a mortise 102, side plates 44, 45, escutcheons 36, 56, a key cylinder 38, a first spindle 74, a turn button 52, a cam body 42 with a through hole to receive the spindle 74, a cam arm 88 to engage a notch 92 in a dead bolt 46, a live bolt 82, a second spindle 32 and opposed handles 34 to actuate the live bolt 82. Lin teaches a spring 8 to engage flat surfaces of a cam as set forth above. It would have been obvious to provide a spring and flat surfaces with the cam body of Chen et al, in view of the teaching of Lin, the motivation being to bias the dead bolt at its locked and unlocked positions and to limit cam rotation.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al in view of Lin as applied to claim 1 above, and further in view of an additional teaching of Lin.

Lin also teaches a stop 44 on a dead bolt as set forth above. It would have been obvious to provide a stop on the dead bolt of Chen et al, in view of the teaching of Lin, the motivation being to prevent the dead bolt from sliding too far.

Claims 8, 19 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al in view of Lin.

Both references have been discussed above. It would have been obvious to provide a stop on the dead bolt of Chen et al, in view of the teaching 44 of Lin, the motivation being to prevent the dead bolt from sliding too far.

Claims 8-15, 19-29 and 31-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al in view of Sh (099) and Glass (152).

Chen has been discussed above. Sh teaches a cam body 70 having a cam arm 74 with a finger 73 to actuate a dead bolt 40. Glass teaches that it is well known to provide a dead bolt 27 having a first trapezoidal notch 72 and a second notch 84 having a closed end lock indent 89 and a closed end unlock indent 89 cooperable with the finger 58. It would have been obvious to provide the cam and dead bolt of Chen with a cam arm finger cooperable with first and second notches in the dead bolt, in view of the respective teachings of Sh and Glass, the motivation being to prevent the cam from being separable from the dead bolt and to define the limits of travel for the cam and the dead bolt.

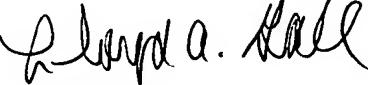
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 571-272-7056. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LG LG  
July 25, 2005

  
Lloyd A. Gall  
Primary Examiner